



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 17601-038001	Application No. 10/769,221
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR 1.98(b))		Applicant Joseph A. Zupanick	
		Filing Date January 30, 2004	Group Art Unit 3672

U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
HD	A1	3,687,204	08/29/1972	Marshall et al.			
	A2	3,759,328	09/18/1973	Ueber et al.			
	A3	4,356,866	11/02/1982	Savins			
	A4	4,396,075	08/02/1983	Wood et al.			
	A5	Re. 32,623	03/15/1988	Marshall et al.			
	A6	5,207,271	05/04/1993	Sanchez et al.			
	A7	5,520,252	05/28/1996	McNair			
	A8	5,664,911	09/09/1997	Bridges et al.			
	A9	5,733,067	03/31/1998	Hunt et al.			
	A10	RE38,642 E	11/02/2004	Gondouin			
	A11	2005/0257962	11/24/2005	Zupanick			
	A12	2006/0096755	05/11/2006	Zupanick			

Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	B1	WO 03/036023	05/01/2003	WIPO			N/A	
	B2	UA 37,720 A	05/15/2001	Ukraine			Spec Only	

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	C1	Notification of Transmittal of the International Preliminary Report of Patentability (1 page) and International Preliminary Report on Patentability (12 pages) mailed January 9, 2006 for International Application No. PCT/US2004/036616
↓	C2	Notification Concerning Transmittal of Copy of International Preliminary Report on Patentability (Chapter 1 of the Patent Cooperation Treaty) (1 page), International Preliminary Report on Patentability (1 page), and Written Opinion of the International Searching Authority (7 pages) mailed December 22, 2005 for International Application No. PCT/US2004/017048
HD	C3	European Search and Examination Report, completed December 5, 2005 for Application Number EP 05020737, 5 pages

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Other Documents (include Author, Title, Date, and Place of Publication)			
Examiner Initial	Desig. ID	Document	
HD	C4	P.C. Thakur and W.N. Poundstone, " <i>Horizontal Drilling Technology for Advance Degasification</i> ," Society of Mining Engineers of AIME, Preprint Number 79-113, For presentation at the 1979 AIME Annual Meeting, New Orleans, Louisiana, February 18-22, 1979, Engineering Societies Library stamp dated February 5, 1980, 11 pages.	
	C5	Notification Concerning Transmittal of Copy of International Preliminary Report on Patentability (1 page), International Preliminary Report on Patentability (1 page), and Written Opinion of the International Searching Authority (5 pages) mailed February 9, 2006 for International Application No. PCT/US2004/024518	
	C6	Wang Weiping, " <i>Trend of Drilling Technology Abroad</i> ," Petroleum Drilling and Production Technology, 1995 (Volume 17), Issue 6, www.cnki.net , 8 pages, translation, original in Chinese	
	C7	Tver, David, <u>The Petroleum Dictionary</u> , 1980, page 221.	
	C8	Rennick, et al., " <i>Demonstration of Safety Plugging of Oil Wells Penetrating Appalachian Coal Mines</i> ," Bureau of Mines Coal Mine Health and Safety Research Program, Technical Progress Report - 56, U.S. Department of the Interior, July 1972, 25 pages	
	C9	George N. Aul and Joseph Cervik, " <i>Grouting Horizontal Drainage Holes in Coalbeds</i> ," RI 8375, Bureau of Mines Report of Investigations, U.S. Department of the Interior, 1979, 21 pages	
	C10	Paul J. Componation, et al., " <i>Cleaning Out, Sealing and Mining Through Wells Penetrating Areas of Active Coal Mines in Northern West Virginia</i> ," MESA Information Report 1052, U.S. Department of the Interior, 1977, 26 pages	
	C11	George S. Rice, " <i>Notes on the Prevention of Dust and Gas Explosions in Coal Mines</i> ," Technical Paper 56, Bureau of Mines, Department of the Interior, copyright 1913, 12 pages	
	C12	George S. Rice, et al., " <i>Oil and Gas Wells Through Workable Coal Beds</i> ," Bulletin 65, Petroleum Technology 7, Bureau of Mines, Department of the Interior, copyright 1913, 54 pages	
	C13	Notification of Transmittal of the International Preliminary Report on Patentability (1 page) and International Preliminary Report on Patentability (8 pages) for International Application No. PCT/US2005/002162 mailed May 3, 2006	
	C14	D. Nathan Meehan, " <i>Technology Vital For Horizontal Well Success</i> ," OIL & GAS JOURNAL, December 11, 1995, 8 pages	
	C15	B.A. Tarr, A.F. Kuckes and M.V. Ac, " <i>Use of New Ranging Tool to Position a Vertical Well Adjacent to a Horizontal Well</i> ," SPE DRILLING ENGINEERING, June 1992, 7 pages	
	C16	William J. McDonald, Ph.D., John H. Cohen, and C. Mel Hightower, " <i>New Lightweight Fluids for Underbalanced Drilling</i> ," believed to be on or about 1998, 10 pages	
	C17	Philip C. Crouse, " <i>Application and Needs for Advanced Multilateral Technologies and Strategies</i> ," Website: www.netl.doe.gov/publications/proceedings/97/97ng/ng97.pdf NG2-5.pdf, Believed to be on or about 1997, 9 pages	
	C18	Dan Themig, " <i>Multi-Laterals Providing New Options</i> ," THE AMERICAN OIL & GAS REPORTER, V. 39, No. 7, July 1996, 4 pages	
↓	C19	Daniel D. Geltman, " <i>Integrated Underbalanced Directional Drilling System</i> ," Interim Report for Period of Performance 10/1/95 - 2/14/96, DOE FETC Contract DE-AC21-95MC31103, March 1997, 23 pages	
HD	C20	J.D. Gallivan, N.R. Hewitt, M. Olsen, J.M. Peden, D. Tehrani and A.A.P. Tweedie, " <i>Quantifying the Benefits of Multi-Lateral Producing Wells</i> ," SPE 30441, Society of Petroleum Engineers, Inc., Copyright 1995, 7 pages	

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Examiner Initial	Desig. ID	Document	
HD	C21	C.A. Ehlig-Economides, G.R. Mowat and C. Corbett, "Techniques for Multibranch Well Trajectory Design in the Context of a Three-Dimensional Reservoir Model," SPE 35505, Society of Petroleum Engineers, Copyright 1996, 8 pages	
	C22	Stephen R. Dittoe, Albertus Retnanto, and Michael J. Economides, "An Analysis of Reserves Enhancement in Petroleum Reservoirs with Horizontal and Multi-Lateral Wells," SPE 37037, Society of Petroleum Engineers, Copyright 1996, 9 pages	
	C23	D.L. Boreck and M.T. Strever, "Conservation of Methane from Colorado's Mined/Minable Coal Beds: A Feasibility Study," Open-File Report 80-5, Colorado Geological Survey, Department of Natural Resources, Denver, Colorado, October 1980, 101 pages	
	C24	B.G. kta and T. Ertekin, "Implementation of a Local Grid Refinement Technique in Modeling Slanted, Undulating Horizontal and Multi-Lateral Wells," SPE 56624, Society of Petroleum Engineers, Copyright 1999, 10 pages	
	C25	W.H. Leach Jr., "New Technology for CBM Production," Oil and Gas Investor, Opportunities in Coalbed Methane, December 2002, 6 pages	
	C26	David Wagman, "CBM Investors Keep Their Guard Up," Oil and Gas Investor, Opportunities in Coalbed Methane, December 2002, 5 pages	
	C27	Stephen D. Schwochow, "CBM: Coming to a Basin Near You," Oil and Gas Investor, Opportunities in Coalbed Methane, December 2002, 7 pages	
	C28	"White Paper: Guidebook on Coalbed Methane Drainage for Underground Coal Mines," paper prepared under U.S. Environmental Protection Agency Cooperative Agreement No. CX824467-01-0 with The Pennsylvania State University by Jan M. Mutmansky, April 1999, 50 pages	
	C29	M.G. Zabetakis, Maurice Deul, and M.L. Skow, "Methane Control in United States Coal Mines - 1972," Information Circular 8600, United States Department of the Interior, Bureau of Mines Information Circular/1973, 26 pages	
	C30	B. Goktas, "A Comparative Analysis of the Production Characteristics of Cavity Completions and Hydraulic Fractures in Coalbed Methane Reservoirs," Society of Petroleum Engineers, SPE 55600, Copyright 1999, 10 pages	
	C31	William P. Diamond and David C. Oyler, "Drilling Long Horizontal Coalbed Methane Drainage Holes from a Directional Surface Borehole," Society of Petroleum Engineers, SPE/DOE 8968, 1980, 6 pages	
	C32	Turgay Ertekin, Wonmo Sung, and Fred C. Schwerer, "Production Performance Analysis of Horizontal Drainage Wells for the Degasification of Coal Seams," JOURNAL OF PETROLEUM TECHNOLOGY, May 1988, 8 pages	
	C33	Patrick B. Tracy, "Lateral Drilling Technology Tested on UCG Project," IADC/SPE 17237, IADC/SPE Drilling Conference, Copyright 1988, 10 pages	
	C34	P.S. Sarkar and J.M. Rajtar, "Transient Well Testing of Coalbed Methane Reservoirs With Horizontal Wells," SPE 27681, Society of Petroleum Engineers, Copyright 1994, 9 pages	
	C35	R.A. Schraufnagel, D.G. Hill and R.A. McBane, "Coalbed Methane - A Decade of Success," SPE 28581, Society of Petroleum Engineers, Copyright 1994, 14 pages	
↓	C36	J.R. Kelafant, C.M. Boyer, and M.D. Zuber, "Production Potential and Strategies for Coalbed Methane in the Central Appalachian Basin," SPE 18550, Society of Petroleum Engineers, Copyright 1988, 8 pages	
HD	C37	Ian Palmer, John McLennan, and Mike Kutas, "Completions and Stimulations for Coalbed Methane Wells," SPE 30012, Society of Petroleum Engineers, Copyright 1995, 13 pages	

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Examiner Initial	Desig. ID	Document	
HD	C38	John E. Jochen and Bradley M. Robinson, "Survey of Horizontal Gas Well Activity," SPE 35639, Society of Petroleum Engineers, Copyright 1996, 5 pages	
	C39	R.G. Jeffrey, J.R. Enever, J.H. Wood, J.P. Connors, S.K. Choi, K.T.A. Meaney, D.A. Casey, and R.A. Koenig, "A Stimulation and Production Experiment in a Vertical Coal Seam Gas Drainage Well," SPE 36982, Society of Petroleum Engineers, Copyright 1996, 7 pages	
	C40	Matt C. Rowan and Michael J. Whims, "Multilateral Well Enhances Gas Storage Deliverability," OIL & GAS JOURNAL, December 25, 1995, 4 pages	
	C41	Dan Thermig, "Planning and Evaluation are Crucial to Multilateral Wells," Petroleum Engineer International, January 1996, 3 pages	
	C42	Larry Comeau, Randy Pustanyk, Ray Smith and Ian Gilles, "Lateral Tie-Back System Increases Reservoir Exposure," WORLD OIL, July 1995, 5 pages	
	C43	J. Smith, M.J. Economides and T.P. Frick, "Reducing Economic Risk in Areally Anisotropic Formations With Multiple-Lateral Horizontal Wells," SPE 30647, Society of Petroleum Engineers, Copyright 1995, 14 pages	
	C44	Scott Thomson, Andrew Lukas, and Duncan McDonald, "Maximising Coal Seam Methane Extraction through Advanced Drilling Technology," Lucas, Technical Paper, Second Annual Australian Coal Seam & Mine Methane Conference, February 19-20, 2003, 14 pages	
	C45	William P. Diamond and David C. Oyler, "Directional Drilling for Coalbed Degasification in Advance of Mining," Proceedings of the 2 nd Annual Methane Recovery from Coalbeds Symposium, April 18-20, 1979, 17 pages	
	C46	John L. Stalder, Gregory D. York, Robert J. Kopper, Carl M. Curtis and Tony L. Cole, and Jeffrey H. Copley, "Multilateral-Horizontal Wells Increase Rate and Lower Cost Per Barrel in the Zuata Field, Faja, Venezuela," SPE 69700, Society of Petroleum Engineers, Copyright 2001, 9 pages	
	C47	Brent Lawson, "Multilateral-Well Planning," Synopsis of SPE 39245, JPT, July 1998, 4 pages	
	C48	A. Njaerheim, R. Rovde, E. Kvale, S.A. Kvamme, and H.M. Bjoerneli, "Multilateral Well in Low-Productivity Zones," Synopsis of SPE 39356, JPT, July 1998, 4 pages	
	C49	S.W. Bokhari, A.J. Hatch, A. Kyei, and O.C. Werngren, "Improved Recovery from Tight Gas Sands with Multilateral Drilling," Synopsis of SPE 38629, JPT, July 1998, 4 pages	
	C50	S.K. Vij, S.L. Narasaiah, Anup Walia, and Gyan Singh, "Adopting Multilateral Technology," Synopsis of SPE 39509, JPT, July 1998, 3 pages	
	C51	William P. Diamond, David C. Oyler, and Herbert H. Fields, "Directionally Controlled Drilling to Horizontally Intercept Selected Strata, Upper Freeport Coalbed, Green County, PA," Bureau of Mines Report of Investigations/1977, RI 8231, 1977, 25 pages	
	C52	David C. Oyler, William P. Diamond, and Paul W. Jeran, "Directional Drilling for Coalbed Degasification," Program Goals and Progress in 1978, Bureau of Mines Report of Investigations/1979, RI 8380, 1979, 17 pages	
	C53	United States Department of the Interior, "Methane Control Research: Summary of Results, 1964-80," Bureau of Mines Bulletin, Bulletin 687, 1988, 188 pages	
↓	C54	EPA, "Identifying Opportunities for Methane Recovery at U.S. Coal Mines: Profiles of Selected Gassy Underground Coal Mines 1997-2001," EPA Publication EPA 430-K-04-003, July 2004, 202 pages	
HD	C55	Marshall DeLuca, "Multilateral Completions on the Verge of Mainstream," OFFSHORE, April 1997, 2 pages	

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HD	C56	Bob Williams, "Operators Unlocking North Slope's Viscous Oil Commerciality," OIL & GAS JOURNAL, August 6, 2001, 5 pages	
	C57	James P. Oberkircher, "The Economic Viability of Multilateral Wells," IADC/SPE 59202, Society of Petroleum Engineers, Copyright 2000, 10 pages	
	C58	Jim Oberkircher, "What is the Future of Multilateral Technology?," WORLD OIL, June 2001, 3 pages	
	C59	Rick Von Flatern, "Operators Are Ready For More Sophisticated Multilateral Well Technology," Petroleum Engineer International, January 1996, 4 pages	
	C60	Kyle S. Graves, "Multiple Horizontal Drainholes Can Improve Production," OIL & GAS JOURNAL, OGJ Special, February 14, 1994, 5 pages	
	C61	Guntis, Moritis, "Sincor Nears Upgrading, Plateau Production Phase," OIL & GAS JOURNAL, October 29, 2001, 1 page	
	C62	Guntis Moritis, "Smart, Intelligent Wells," OIL & GAS JOURNAL, April 2, 2001, 6 pages	
	C63	Craig Coull, "Intelligent Completion Provides Savings for Snorre TLP," OIL & GAS JOURNAL, April 2, 2001, 2 pages	
	C64	D.T. Vo and M.V. Madden, "Performance Evaluation of Trilateral Wells: Field Examples," SPE 28376, Society of Petroleum Engineers, copyright 1994, 16 pages	
	C65	Dean E. Gaddy, "Pioneering Work, Economic Factors Provide Insights Into Russian Drilling Technology," OIL & GAS JOURNAL, July 6, 1998, 3 pages	
	C66	"Optimal Multilateral-Well Design for a Heavy-Oil Reservoir," Synopsis of SPE 37554 by D.W. Boardman, JPT, July 1997, 3 pages	
	C67	"Multilateral-Well Completion-System Advances," Synopsis of SPE 39125 by J.R. Longbottom et al., JPT, July 1997, 3 pages	
	C68	"Optimal Multilateral/Multibranch Completions," Synopsis of SPE 38033 by Hironori Sugiyama et al., JPT, July 1997, 5 pages	
	C69	"Multilateral Experiences: IDD El Shargi North Dome Field (QATAR)," Synopsis of SPE 37675 by J.R. Scofield et al., JPT, July 1997, 3 pages	
	C70	"Moving Toward the 'Intelligent Well,'" Synopsis of SPE 39126 by Clark E. Robison, JPT, July 1997, 3 pages	
	C71	"Short-Radius Laterals: An Operator's Experience," Synopsis of SPE 37493 by C. Ellis et al., JPT, July 1997, 3 pages	
	C72	"Analyzing a Multilateral-Well Failure," Synopsis of SPE 38268 by A. Ray Brister, JPT, July 1997, 3 pages	
	C73	"A New Concept for Multibranch Technology," Synopsis of SPE 39123 by Mark Stracke et al., JPT, July 1997, 3 pages	
	C74	"Classification Clarifies Multilateral Options," Synopsis of SPE 38493 by C. Hogg, JPT, July 1997, 3 pages	
	C75	"Infill Development With Multilateral-Well Technology," Synopsis of SPE 38030 by Sau-Wai Wong et al., JPT, July 1997, 3 pages	
↓	C76	Brad Califf and Denny Kerr, "UPRC Completes First Quad-Lateral Well," PETROLEUM ENGINEER INTERNATIONAL, September 1993, 4 pages	
HD	C77	Jack Winton, "Use of Multi-lateral Wells to Access Marginal Reservoirs," OFFSHORE, February 1999, 3 pages	

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HD	C78	J.R. Salas, P.J. Clifford and D.P. Jenkins, "Brief: Multilateral Well Performance Prediction," JPT, September 1996, 3 pages	
	C79	Mike R. Chambers, "Multilateral Technology Gains Broader Acceptance," OIL & GAS JOURNAL, November 23, 1998, 5 pages	
	C80	S. Ikeda, T. Takeuchi, and P.C. Crouse, "An Investigative Study on Horizontal Well and Extended Reach Technologies With Reported Problem Areas and Operational Practice in North America and Europe," IADC/SPE 35054, Society of Petroleum Engineers, Copyright 1996, 8 pages	
	C81	Greg Nazzal, "Extended-Reach Wells Tap Outlying Reserves," WORLD OIL, March 1993, 8 pages	
	C82	Bambang Tjondrodiputro, Harry Eddyarso and Kim Jones, "How ARCO Drills High-Angle Wells Offshore Indonesia," WORLD OIL, March 1993, 11 pages	
	C83	S. Hovda, et al., "World's First Application of a Multilateral System Combining a Cased and Cemented Junction With Fullbore Access to Both Laterals," SPE 36488, Society of Petroleum Engineers, Copyright 1996, 15 pages	
	C84	Robert A. Gardes, "Micro-annulus Under-balanced Drilling of Multilateral Wells," OFFSHORE, May 1996, 4 pages	
	C85	Brent Lawson, "Phillips Multilateral Features Several Firsts for North Sea," OFFSHORE, February 1997, 2 pages	
	C86	J.R. Scofield, B. Laney and P. Woodard, "Field Experience With Multi-Laterals in the Idd El Shargi North Dome Field (Qatar)," SPE/IADC 37675, Society of Petroleum Engineers, Copyright 1997, 11 pages	
	C87	Jeremy Beckman, "Coiled Tubing, Reamer Shoes Push Through Barriers in North Sea Wells," OFFSHORE, February 1997, 1 page	
	C88	C.H. Fleming, "Comparing Performance of Horizontal Versus Vertical Wells," WORLD OIL, March 1993, 7 pages	
	C89	Larry A. Cress and Stephen W. Miller, "Dual Horizontal Extension Drilled Using Retrievable Whipstock," WORLD OIL, June 1993, 9 pages	
	C90	Guntis Moritis, "Heavy Oil Expansions Gather Momentum Worldwide," OIL & GAS JOURNAL, August 14, 1995, 6 pages	
	C91	K.W. Hart and L.V. Jankowski, "The Application of Slant Hole Drilling in Development of Shallow Heavy Oil Deposits," THE JOURNAL OF CANADIAN PETROLEUM TECHNOLOGY, January-February 1984, Montreal, 6 pages	
	C92	Jeff Smith and Bob Edwards, "Slant Rigs Offer Big Payoffs in Shallow Drilling," OIL & GAS JOURNAL, March 30, 1992, 3 pages	
	C93	Ravil Gabdullinovich Salikhov, Evgeny Fedyorovich Dubrovin, and Vladimir Vladimirovich Sledkov, "Cluster and Dual-Lateral Drilling Technologies Optimize Russian Well Production," OIL & GAS JOURNAL, November 24, 1997, 7 pages	
↓	C94	Dean E. Gaddy, "Inland Barge to Allow Cluster Drilling in Nigeria," OIL & GAS JOURNAL, August 30, 1999, 7 pages	
HD	C95	Cliff Hogg, "Comparison of Multilateral Completion Scenarios and Their Application," SPE 38493, Society of Petroleum Engineers, Copyright 1997, 11 pages	
HD	C96	S.W. Bokhari, A.J. Hatch, A. Kyei and O.C. Wemgren, "Improved Recoveries in the Pickerill Field from Multilateral Drilling into Tight Gas Sands," SPE 38629, Society of Petroleum Engineers, Copyright 1997, 15 pages	

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HD	C97	J.R. Longbottom, Dana Dale, Kevin Waddell, Scott Bruha, and John Roberts, "Development, Testing, and Field Case Histories of Multilateral Well Completion Systems," SPE 36994, Society of Petroleum Engineers, Copyright 1996, 16 pages	
	C98	E.J. Antczak, D.G.L. Smith, D.L. Roberts, Brent Lawson, and Robert Norris, "Implementation of an Advanced Multi-Lateral System With Coiled Tubing Accessibility," SPE/IADC 37673, Society of Petroleum Engineers, Copyright 1997, 9 pages	
	C99	H. Azoba, O. Akinmoladun, H. Rothenhofer, D. Kent and N. Nawfal, "World Record Dual- and Trilateral Wells," SPE/IADC 39240, Society of Petroleum Engineers, Copyright 1997, 6 pages	
	C100	R.W. Taylor and Rick Russell, "Case Histories: Drilling and Completing Multilateral Horizontal Wells in the Middle East," SPE/IADC 39243, Society of Petroleum Engineers, Copyright 1997, 14 pages	
	C101	D.K. Triolo and R.A. Mathes, "Review of a Multi-Lateral Drilling and Stimulation Program," SPE/IADC 39242, copyright 1997, Society of Petroleum Engineers, 13 pages	
	C102	John H. Perry, Leonard J. Prosser, Jr., Joseph Cervik, "Methane Drainage from the Mary Lee Coalbed, Alabama, Using Horizontal Drilling Techniques," SPE/DOE 8967, Society of Petroleum Engineers, May 18, 1980, 6 pages	
	C103	Gerald L. Finfinger, Leonard J. Prosser, and Joseph Cervik, "Influence of Coalbed Characteristics and Geology on Methane Drainage," SPE/DOE 8964, Society of Petroleum Engineers, May 18, 1980, 6 pages	
	C104	Hilmer Von Schonfeldt, B. Rao Pothini, George N. Aul and Roger L. Henderson, "Production and Utilization of Coalbed Methane Gas in Island Creek Coal Company Mines," SPE/DOE 10817, Society of Petroleum Engineers, May 16, 1982, 10 pages	
	C105	Joseph Cervik, H.H. Fields, and G.N. Aul, "Rotary Drilling Holes in Coalbeds for Degasification," RI 8097, Bureau of Mines Report of Investigations, 1975, 26 pages	
	C106	D.G. Masszi and A.A. Kahil, "Coal Demethanation Principles and Field Experience," THE JOURNAL OF CANADIAN PETROLEUM TECHNOLOGY, July-August 1982, 4 pages	
	C107	Tobias W. Goodman, Joseph Cervik, and George N. Aul, "Degasification Study From an Air Shaft in the Beckley Coalbed," RI 8675, Bureau of Mines Report of Investigations, 1982, 23 pages	
	C108	P.C. Thakur and H.D. Dahl, "Horizontal Drilling - A Tool for Improved Productivity," MINING ENGINEERING, March 1982, 3 pages	
	C109	P.C. Thakur and J.G. Davis II, "How to Plan for Methane Control in Underground Coal Mines," MINING ENGINEERING, October 1977, 5 pages	
	C110	A.B. Yost II and B.H. Javins, "Overview of Appalachian Basin High-Angle and Horizontal Air and Mud Drilling," SPE 23445, Society of Petroleum Engineers, October 22, 1991, 14 pages	
	C111	Pramod C. Thakur, "Methane Flow in the Pittsburgh Coal Seam," Third International Mine Ventilation Congress, England, U.K., June 13-19, 1984, 17 pages	
↓	C112	Chapter 10 by Pramod C. Thakur, "Methane Control for Longwall Gobs," LONGWALL-SHORTWALL MINING, STATE OF THE ART by R.V. Ramani, published by New York: Society of Mining Engineers of the American Institute of Mining, Metallurgical, and Petroleum Engineers, 1981, 7 pages	
HD	C113	Pramod C. Thakur, Stephen D. Lauer, and Joseph Cervik, "Methane Drainage With Cross-Measure Boreholes on a Retreat Longwall Face," Preprint No. 83-398, Society of Mining Engineers of AIME, for presentation at the SME-AIME Fall Meeting and Exhibit, Salt Lake City, Utah, October 19-21, 1983, 14 pages	

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Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant Joseph A. Zupanick	
		Filing Date January 30, 2004	Group Art Unit 3672
(37 CFR §1.98(b))			

Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
HD	C114	Warren F. Dobson and Daniel R. Seelye, "Mining Technology Assists Oil Recovery from Wyoming Field," SPE 9418, Society of Petroleum Engineers of AIME, Copyright 1980, 7 pages
	C115	T.L. Logan, J.J. Schwoebel and D.M. Horner, "Application of Horizontal Drainhole Drilling Technology for Coalbed Methane Recovery," SPE/DOE 16409, Society of Petroleum Engineers/U.S. Department of Energy, Copyright 1997, 12 pages
	C116	Samuel O. Osisanya and Robert F. Schaffitzel, "A Review of Horizontal Drilling and Completion Techniques for Recovery of Coalbed Methane," SPE 37131, Society of Petroleum Engineers, Copyright 1996, 13 pages
	C117	S.D. Joshi, "A Review of Horizontal Well and Drainhole Technology," SPE 16868, Society of Petroleum Engineers, Copyright 1987, 17 pages
	C118	R. Bitto, A.B. Henderson and L. Broussard, "Recent Case Histories of New Well Applications for Horizontal Drilling," SPE 21262, Society of Petroleum Engineers, Copyright 1990, 12 pages
	C119	M.R. Konopczynski, John Hughes and J.E. Best, "A Novel Approach to Initiating Multi-Lateral Horizontal Wells," SPE/IADC 29385, Society of Petroleum Engineers, Copyright 1996, 11 pages
	C120	Kelly Falk and Craig McDonald, "An Overview of Underbalanced Drilling Applications in Canada," SPE 30129, Society of Petroleum Engineers, Copyright 1995, 9 pages
	C121	"Evolution Toward Simpler, Less Risky Multilateral Wells," WORLD OIL, prepared from paper SPE/IADC 67825 by Adam Pasicznyk, June 2001, 8 pages
	C122	"How Multilateral Boreholes Impact Ultimate Recovery Strategies," OFFSHORE, July 1997, 6 pages
	C123	"Trilateral Horizontal Wells Add 10 Million bbl for Unocal," OFFSHORE, December 1993, 2 pages
	C124	Nicholas P. Chironis, "New Borehole Techniques Offer Hope for Gassy Mines," COAL AGE, January 1973, 4 pages
	C125	A. Retnanto, T.P. Frick, C.W. Brand, and M.J. Economides, "Optimal Configurations of Multiple-Lateral Horizontal Wells," SPE 35712, Society of Petroleum Engineers, Copyright 1996, 8 pages
	C126	T.L. Logan, "Horizontal Drainhole Drilling Techniques Used for Coal Seam Resource Exploitation," SPE 18254, Society of Petroleum Engineers, Copyright 1988, 13 pages
	C127	David Hill, Eric Neme, Christine Enlig-Economides and Miguel Mollinedo, "Reentry Drilling Gives New Life to Aging Fields," OILFIELD REVIEW, Autumn 1996, 14 pages
	C128	R.L. Thoms and R.M. Gehle, "Feasibility of Controlled Solution Mining From Horizontal Wells," Solution Mining Research Institute, October 24-27, 1993, 8 pages
	C129	"World's First Trilateral Horizontal Wells on Stream," Oil & Gas Journal, November 29, 1993, 2 pages
	C130	Margaret A. Adams, Jeanne L. Hewitt and Rodney D. Malone, "Coalbed Methane Potential of the Appalachians," SPE/DOE 10802, Society of Petroleum Engineers, Copyright 1982, 10 pages
↓	C131	F.C. Schwerer and A.M. Pavone, "Effect of Pressure-Dependent Permeability on Well-Test Analyses and Long-Term Production of Methane From Coal Seams," SPE/DOE/GRI 12857, Society of Petroleum Engineers, Copyright 1984, 10 pages
HD	C132	Stephen Krickovic and J.D. Kalasky, "Methane Emission Rate Study in a Deep Pocahontas No. 3 Coalbed Mine in Conjunction With Drilling Degasification Holes in the Coalbed," RI-7703, Bureau of Mines Report of Investigations/1972, United States Department of the Interior, 1972, 15 pages

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HD	C133	H.H. Fields, Joseph Cervik, and T.W. Goodman, "Degasification and Production of Natural Gas From an Air Shaft in the Pittsburgh Coalbed," RI-8173, Bureau of Mines Report of Investigations/1976, United States Department of the Interior, 1976, 28 pages	
	C134	Gerald L. Finfinger and Joseph Cervik, "Drainage of Methane From the Overlying Pocahontas No. 4 Coalbed From Workings in the Pocahontas No. 3 Coalbed," RI-8359, Bureau of Mines Report of Investigations/1979, United States Department of the Interior, 1979, 19 pages	
	C135	Gerald L. Finfinger and Joseph Cervik, "Review of Horizontal Drilling Technology for Methane Drainage From U.S. Coalbeds," IC-8829, Bureau of Mines Information Circular/1980, United States Department of the Interior, 1980, 24 pages	
	C136	Andre P. Jourdan and Guy A. Baron, "Elf Drills 1,000 + Ft Horizontally," PETROLEUM ENGINEER INTERNATIONAL, September 1981, 4 pages	
	C137	P.F. Conti, "Controlled Horizontal Drilling," SPE/IADC 18708, Society of Petroleum Engineers, Copyright 1989, 6 pages	
	C138	Armando R. Navarro, "Innovative Techniques Cut Costs in Wetlands Drilling," OIL & GAS JOURNAL, October 14, 1991, 4 pages	
	C139	Victor M. Luhowy and Peter D. Sametz, "Horizontal Wells Prove Effective in Canadian Heavy-Oil Field," OIL & GAS JOURNAL, June 28, 1993, 6 pages	
	C140	D. Lane Becker, "Project Management Improved Multiwell Shallow Gas Development," OIL & GAS JOURNAL, October 16, 1995, 5 pages	
	C141	Mike R. Chambers, "Junction Design Based on Operational Requirements," OIL & GAS JOURNAL, December 7, 1998, 7 pages	
	C142	A.J. Branch, et al., "Remote Real-Time Monitoring Improves Orinoco Drilling Efficiency," OIL & GAS JOURNAL, May 28, 2001, 6 pages	
	C143	D. Keith Murray, "Deep Coals Hold Big Part of Resource," THE AMERICAN OIL & GAS REPORTER, May 2002, 8 pages	
	C144	Nestor Rivera, et al., "Multilateral, Intelligent Well Completion Benefits Explored," OIL & GAS JOURNAL, April 14, 2003, 10 pages	
	C145	HANDBOOK ON COAL BED METHANE PRODUCED WATER: MANAGEMENT AND BENEFICIAL USE ALTERNATIVES, prepared by ALL Consulting, July 2003, 321 pages	
	C146	Nikola Maricic, "Parametric and Predictive Analysis of Horizontal Well Configurations for Coalbed Methane Reservoirs in Appalachian Basin," Thesis, West Virginia University, Department of Petroleum and Natural Gas Engineering, 2004, 162 pages	
	C147	Nikola Maricic, Shahab D. Mohaghegh, and Emre Artun, "A Parametric Study on the Benefits of Drilling Horizontal and Multilateral Wells in Coalbed Methane Reservoirs," SPE 96018, Society of Petroleum Engineers, Copyright 2005, 8 pages	
	C148	D.P. Schlick and J.W. Stevenson, "Methane Degasification Experience at Jim Walter's," Proceedings of the Twelfth Annual Institute on Coal Mining Health, Safety and Research, August 25-27, 1981, 9 pages	
↓	C149	P.C. Thakur, "Optimum Methane Drainage in Gassy Coal Mines," 2003 SME Annual Meeting, copyright 2003 by SME, 4 pages	
HD	C150	Global Methane and the Coal Industry: A Two-Part Report on Methane Emissions from the Coal Industry and Coalbed Methane Recovery and Use, Coal Industry Advisory Board, International Energy Agency, copyright 1994, 72 pages	

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HD	C151	Michael Schumacher, AKZO Salt Inc., "Solution Mining in the Nineties," believed to be in December 2005, 8 pages
HD	C152	Pratt et al., U.S. Patent Application entitled "Cavity Well System," S/N 11/141,335, May 31, 2005, 19 pages

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